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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,204	09/28/2001	Yanling Sun	2	4442

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Docket Administrator
Agere Systems Inc.
P.O. Box 614
Berkeley Heights, NJ 07922-0614

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EXAMINER

NGUYEN, JOHN B

ART UNIT PAPER NUMBER

2819

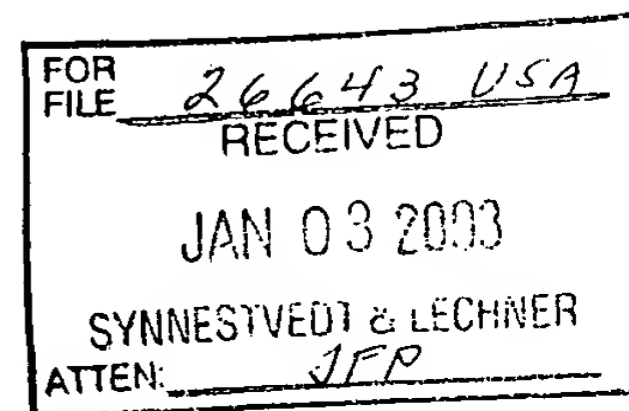
DATE MAILED: 12/04/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

DEC 8



Office Action Summary

Application No.

09/966,204

Applicant(s)

SUN, YANLING

Examiner

John B Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Welland (U.S. Patent No. 6,327,463 B1).

Regarding to claim 1, Welland et al. discloses Phase-locked loop circuit (Figure 2) comprising: a voltage-controlled oscillator (Figure 2, 212) which includes at least one resonator circuit (Figure 3 and Figure 4) for driving the oscillator; a phase-locked loop including frequency control means (ABSTRACT) for controlling the output frequency of said oscillator, such that during operation said resonator circuit runs at a resonator frequency to drive said oscillator at an oscillator output frequency which is an integer multiple of the resonator frequency (column 7, lines 45-67; column 8, lines 1-60); wherein the resonator frequency is coupled to the frequency control means of the phase-locked loop, in that the resonator circuit includes at least one adjustable component to control the resonator frequency and in that the phase-locked loop frequency control means are coupled to the resonator circuit for controlling the resonator frequency (Figure 4 and 5, column 8, lines 17-65; column 9, lines 33 +..) as claim 1 discloses.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Welland (U.S. Patent No. 6,327,463 B1) in view of Mucke et al. (U.S. Patent No. 6,268,778 B1).

Regarding to claims 5, 6 and 8, Welland Discloses Phase-locked loop (Figure 2) comprising: a resonator (figure 4), wherein the resonator circuit comprise LC circuits with at least one variable capacitor (figure 4, 402,406). However, Welland fails to show a VCO comprises a push-push circuit, a pair of resonator circuit, a pair of substantially identical active devices, respectively.

Regarding to claims 2-4, 7 and 9, Figures 1(100) Mucke et al. disclosed a Voltage-controlled oscillator (VCO) comprises a push-push circuit (112); a pair of resonator circuits (combine each set of 102,104); a pair of substantially identical active devices (136,138). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Mucke et al. to the device of Welland for the purpose of a balanced circuit in which two active devices oscillate at the fundamental frequency 180 degree out of phase and in which even harmonic signals are generated in phase.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See enclosed Form PTO-892).

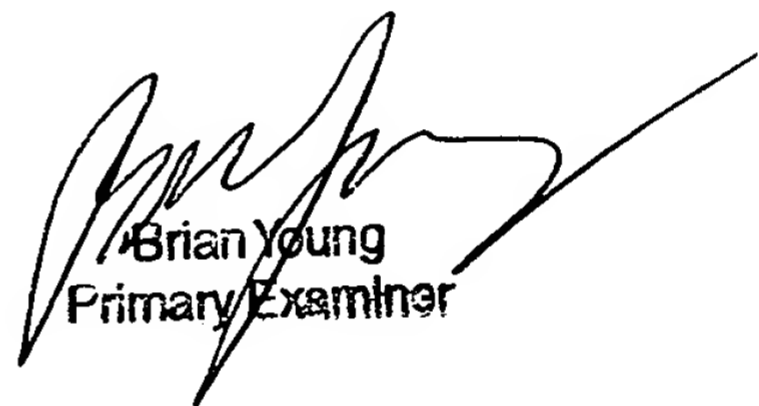
Art Unit: 2819

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B Nguyen whose telephone number is (703) 308-6039. The examiner can normally be reached on 8AM-4: 30 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on (703) 305-3493. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

John B. Nguyen
November 25, 2002



Brian Young
Primary Examiner